Lansing (J. V.)

ALBANY MEDICAL COLLEGE.

ADDRESS

BY

JOHN V. LANSING, M.D.



ALBANY MEDICAL COLLEGE.

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THERAPEUTICAL SKEPTICISM;

AN

ADDRESS,

INTRODUCTORY TO THE COURSE OF 1869.

BY

JOHN V. LANSING, M. D.,

PROFESSOR OF MATERIA MEDICA AND PHYSIOLOGY.

PUBLISHED BY THE CLASS.

24478c.

JOEL MUNSELL.

CORRESPONDENCE.

ALBANY MEDICAL COLLEGE, Sept. 9, 1869.

PROF. LANSING:

Dear Sir—Desirous of securing a copy of your Opening Address, the Class of '69 called a meeting, P. J. Zeh, chairman, and it was unanimously resolved to request your manuscript for publication, and the following named gentlemen were chosen committee for that purpose.

Hoping that you will comply with the request,

We remain, sir, your most obedient servants,

WILLIAM H. MURRAY, Chairman.
WILLIS G. TUCKER,
J. R. DAVIDSON,
B. H. STEENBERG,
JAMES H. STRUBLE,

CHARLES M. LEFLER,

Committee.

Secretary.

ALBANY, Sept. 11, 1869.

GENTLEMEN:

Acknowledging the compliment conveyed in the request for a copy of my Introductory Address, I herewith place the same at your disposal.

Yours, respectfully,

JOHN V. LANSING.

To Messis. W. H. Murray,
W. G. Tucker,
J. R. Davidson,
B. H. Steenberg,
James H. Struble,
Committee.
Charles M. Lefler,
Secretary.

ADDRESS.

GENTLEMEN:

Year by year, for over thirty seasons back, this institution has opened to successive generations of medical students, its hospitable doors. Year by year, have been spoken to those who entered, its warm words of welcome, its kind assurances of interest and its earnest wishes to promote the object of their coming, which indeed was none other than the object for which it was founded—to secure to them a sound medical education. How well those wishes have been fulfilled, let the long list of those who look up to it from every portion of our land, and truly and tenderly call it their medical alma mater, answer.

It opens its doors again to-day, and repeats through me, to you who enter, the same warm welcome, the same firm assurances, and the same earnest wishes to make the days to come as fruitful of good, in this respect, as those gone by. There is, however, peculiar interest in the greeting of to-day, that has never marked similar ones in the history of this institution. There were voices mingling in those that will never speak again, and eyes that looked and earnest hands that pressed encouragement, that will never thrill again the student's heart.

Since the last gathering like this, two of the representative men of this institution, Drs. March, and Pomfret, resting from their labors have passed away from our earthly presence and companionship. Their places here shall know them no more forever. It were idle however for this cause to utter words of vain regret. Stars fall nightly "nor change the visage of the firmament" so, men perish, and still the world moves on, and institutions live to the accomplishment of their purposes. Of the long and glowing life of the one to whom this institution largely owes its origin and present high position; of the ripe and varied culture of the other, whose teachings here lent to it the promise of so much of excellence, I do not now propose to speak. This sad yet pleasant testimony will doubtless

be borne to you from other loving hearts than mine. This I may, however, say that whatever of power or beauty or inspiration there is in examples of lives made useful, and honorable in our profession, speaks to-day from the lives of those we have named to each young student mind before me.

After this brief welcome, I approach the special duty assigned me, of prefacing the work of the coming session of this college, with introductory words. I have thought that something of propriety, perhaps of profit, might grace the occasion, if such words were grouped about the subject of

Skepticism in Therapeutics.

By this I mean, not merely want of faith in the actual curative powers of medicines themselves, but also want of faith in the prevailing application of them in the treatment of disease.

How far in the happy or sad termination of any given case, treated secundem artem, has therapeutic intervention contributed to the one result or the other? The feeling of doubt embodied in this question, has it any place in the general mind of the profession?

Its Existence.

While it is true that there are among us many enthusiastic and confident souls, who believing yet firmly in the traditional potency of drugs, never stagger at the burden of removing the material forms of disease, or of even renovating structurally changed organs by aid of pill or potion only; yet I do not hesitate to assert that there are many more who stand by the bedside of the sick, with a cautious, humble faith in therapeutic agency, and oftentimes with struggling, torturing doubts how far they may, rationally, be permitted to interfere.

This might even be anticipated from the changed and changing courses of treatment of disease, some of them so old as to have become habitual with the profession. The fathers did this and it was recorded. But an hour of questioning comes and the original principles on which it was founded, and the treatment itself, are discarded. Results as satisfactory as before, but not more so, are compelled to seek other references for their explanation, leaving always, however, upon the mind a residuum of doubt as to the real values of therapeutic effects.

The very administration of complex pharmaceutical preparations implies doubt as to some of the constituents; much more so, do fre-

quent changes and intemperate use of remedies suggest an ill-regulated faith in their power.

And who shall say that changes and inconsistencies of medication are rare in the history of cases now-a-days, or that the simplest remedies and the least of them for the purpose is the rule of action governing prescriptions generally?

The rise and fall of new remedies is but another illustration of the existence; if it be not also a cause of the feeling we are considering. As if grown weary and dissatisfied with our present means of relief, we gladly turned towards anything that even suggested better results! Who cannot remember the promising advent of some new remedial star, which heralded with journalistic praises and vouched for by esteemed authorities was thought to be for the healing of the nations? After a brief path-way of splendor how feeble were its rays and how few its worshipers?

Even the faith of years in old familiar medicines receives every now and then some rude shock to startle it from its venerable propriety. During the year past, the claim so long acquiesced in, of the special action of mercurial preparations to increase the biliary secretion is not only questioned but denied. After a long and careful series of experiments, a committee composed of some of the best men of the profession report to the British Association for Science, that non-purgative doses of mercurials administered to dogs do not increase, and that purgative doses of the same actually diminish the biliary secretion. Whether this be true of man or not, and the committee argue plausibly that it must be, it is doubtful if the relations between this agent and hepatic affections will ever be as intimate or unquestioned as before this report.

The existence then in the midst of the profession of a certain degree of the feeling we have termed therapeutical skepticism cannot be denied. Indeed we think the old charge so often quoted against medical men of "ubi tres medici, ibi duo athei," if softened in its last epithet to sceptici might not in this connection be very wrongly quoted, as expressive of a fact. It will be of interest now to inquire how this feeling has arisen, or what are some of the causes that produce it.

Causes originating it.

I think I do not misconceive the subject, when I state that many faiths are weakened by disappointment in expected results, due to

the quality of the remedies used. All medicines are presumed to be pure. Certain standards are established for them, and their satisfactory employment is based upon the assumption of their being equal, in every respect, to such standards. Are they so? The greed for gain which stops not at the adulteration of food will scarcely hesitate at the further step, the adulteration or falsification of medicines. The following statement made by one of its most reliable members,* to the American Pharmaceutical Association of last year, is quoted as bearing on the question. Speaking of rhubarb, he says: "it is a very delicate and sensitive drug, and much of it bears evidence of having been gathered immature, or at a wrong season, and much of it of having been spoiled in the drying, but far more appears to get damaged in transportation, so that it is not improbable that a very small part only of the total product ever reaches the market in a normal condition. No matter how or where it is damaged, it must be sold, and if it can be properly "doctored," there is little of it that cannot be made to sell pretty well, either upon faith and the reputation of the seller, or upon appearance, or upon both."

If such things can be truly said of simple rhubarb, what assures us of the reliability of other drugs deemed vitally important in modifying and controlling the graver classes of disease in which they are used? If the factors employed in the solution of any problem have no fixed value, how can a correct result be anticipated? If the strength—the purity—the therapeutic value of a medicine be likewise variable, how can we hope for even approximate certainty in its effects?

Another cause for this feeling may be found in the more general recognition of the principle, that very many diseases have what is called their own peculiar limit of existence, and that all attempts to obstruct or interfere with their progress are ill-advised and injudicious. The study of the natural history of diseases, and the practical application of the truths learned from the study, has certainly relieved the world of much useless and worse than useless medication.

While by no means justified in drawing from this fact any sweeping conclusion against all medication, yet it may legitimately serve as it has done, to weaken that blind and excessive devotion to it, so

^{*} Dr. Squibb.

painfully apparent in the past, and even yet sometimes witnessed in the present.

Again, the general tendency of the human mind at the present day is towards a stricter, more comprehensive, more exhaustive examination than ever before of the questions presented to it. It is not satisfied with theories, nor content with names nor awed by age. This is as true in medical matters, as in theological or political. Phenomena are more closely studied after better methods, and by the aid of finer means of observation. If a fact be asserted, it must be capable of demonstration; if a principle be stated, it must be based upon real data; if a conclusion be drawn, it must be logical.

The errors arising in medicine from the incomplete and imperfect observation of facts, as well as from illogical uses of observed facts, are without number. They are the standard themes of lamentation with all medical philosophers. In no department are they so likely to prevail as in that of therapeutics. The mental qualities necessary to make the good medical observer are not always the property of those who essay the task. There are some who see results only through the medium of their hopes or preconceived ideas. Such find it very difficult, nay impossible, to set forth their observations in the severe and simple lines which should characterize them. There is always a rosy tinge discernible upon their outlines. When we know these men personally, we always allow them a certain margin for imagination's sake. When we do not know them, it is impossible to discount fairly from their statements, and there is left upon the mind after reading them, as we do first in journals and afterwards gathered as authorities in text books, a vague sense of uncertainty that waits for further confirmation before acceptance.

There is also with some minds a singular and almost irresistible temptation to reason hastily after the manner of post hoc propter hoc.

That because an improvement in symptoms, or cessation of morbid processes, followed the use of a particular remedy, that therefore the remedy must be credited as the cause. As if during an epidemic of scarlet fever, one should treat all his cases by the use of minute doses of belladonna, and all successfully, and he should immediately proclaim the wonderful virtues of the drug, with all the confidence of one, to whom cause and effect were transparent processes. It would need, perhaps, only a second epidemic of a more virulent form, to correct his reasoning. But neither in him, nor in those relying on his

assertions would ever again be restored unconditional faith in belladonna in scarlet fever. The illustrations on this point are without number. There are few who cannot recall in their professional experience cases in which they have been crowned with praises for the relief of pain or restoration of disordered function, which from circumstances they knew to be wholly undeserved. And how very hard it is to put away such crowns!

When doubts are bred so freely from such open processes as the simple observation of facts, how much larger and more rapidly do they grow, when we consider the attempted explanation of the modes in which medicines act in the system. There has always existed in the medical mind an intense longing, and never more intense than now, after knowledge in this direction. A longing to know just where, and how, this medicine soothes, that stimulates, or the other depresses. Many are willing to accept the facts themselves and proclaim the futility of investigation, in a field so full of possible errors. Many more, however, are unhappy without some minute explanation, with just enough of physical or chemical truth about it to make a graceful drapery, but far too unsubstantial to admit of rigid proof. From the want of actual knowledge of just where and how these effects are produced, the widest differences of opinion exist in regard to the actions themselves. Particularly is this apparent in the class of medicines whose action is expended on the nervous system.

Ergot contracts the blood vessels of the spinal cord. Ergot has no effect on the blood vessels of the spinal cord. Belladonna is antagonistic to opium. Belladonna increases the hypnotic effect of opium.

The confusion, the complication, and the many contradictions of these opinions, even though they be merely opinions, certainly do not tend to make serene the faith of him who seeks to use them practically.

The last cause we assign for the existence of this feeling springs from the general want of attention, oftentimes amounting to neglect of interest, in the real advances already made and yet possible in this department. The higher and more difficult problems of relief are left unstudied for the more attractive ones of physical diagnosis and pathological anatomy. It is so pleasant to be able to say, here is the level of an effusion, there is a cavity in the lung, this heart valve is defective, or the tissue of the kidney, liver or cord is in this, or that particular stage of degeneration, that when these points are settled the zest of the thing is gone. The contemplation

of pathological results, seems to foreclose all thought of the possibility of changing by any therapeutical agency, the processes occasioning them. Neglect like this begun perhaps in student life, and never afterwards atoned for, ends finally in a kind of knowledge in this branch of medicine at best vague and undetermined and burdened with all manner of doubts.

The Dangers to be feared from it.

Having spoken of some of the causes of a feeling of therapeutical skepticism, which, if not loudly pronounced, seems to have a real existence in the heart of the profession, we come next to inquire as to its tendency and effect. What of danger is embodied in its presence, and what is the hope of its dissipation?

An utter want of faith would, if honestly lived up to, lead to the cessation of all efforts in this direction. Any other line of conduct would, of course, be one of deception and therefore dishonorable. But there is no fear of any such eclipse of faith as would make dark forever the light of many well known therapeutical agents, which for centuries have blessed mankind in suffering and disease. There is no fear that the labors and accumulated experience of the past in this department will ever turn out a barren legacy. If, as age succeeds to age, there be a careless tossing over by each of the goods left it by its predecessor, and a lack of reverence for what is old, still there are too many reliable and important facts observed by sincere and careful intellects to be recklessly thrown aside.

A certain measure of skepticism does not imply total infidelity. It may even be of a kind to which the term prudent would not be misapplied leading by cautious steps to greater certainty, and in so far to be commended. It may be excessive, however, and of so fatal a character as to lead to indecision, the loss of golden opportunities for possible good, and the paralysis of all effort. Herein lies the practical danger, for we make no mention of the poor souls, who, lost through the sin of unbelief, have gone out from among us and are wandering now in a darker region of shadows and absurdities.

How relieved from its Dangers?

In what direction then lies relief from such a danger? Evidently first, in securing the perfection and integrity of the agents made use of. All improvements in the forms of medicines, whereby they are made more definite in their composition, and each after the manner

of its kind, of a more uniform strength, just so much increases exactness in the giving, and certainty in the estimation of their effects. Hence every medicine of vegetable origin that chemistry can make available to us in the form of its alkaloid, or of whatever origin, can present to us in a more improved or constant form than at present furnished, is an advance towards accuracy and reliability of results.

But what shall be said on the score of integrity, and who is to secure to the prescriber the purity of his drug? There are examiners of crude commercial forms, and we hear occasionally of worthless specimens rejected before they reach the manufacturer's hands. But who guards the keepers, and stands between the manufacturers or the druggist and the physician?

Whatever method preserves the final disposition of the medicine from any the slightest suspicion of its honesty, just so far tends to keep the faith in it as a medicine unimpaired.

In the next place, while recognizing the power of nature as oftentimes alone sufficient for the successful management of disease, it will be directly in the interest of therapeutic certainty to have such cases thoroughly ascertained, and set apart, as sacred and exempt from officious interference. The list of this class of cases cannot yet be considered as completed. Every instance, therefore, showing the progress or termination of any disease, if left alone, tends to correct and make more precise the inferences drawn from similar cases which have been, or may be submitted to a regular classical treatment. He who can discriminate the closest between such cases as should be left alone, and such as should be interfered with; he who can in any given case even, best discern the point where medication should begin and cease, will be the least vexed with debilitating doubts, and the most efficient because the most direct and concentrated in his efforts to relieve. There is not in this necessarily any ignoring of therapeutic needs, but a limitation of them, and therefore higher chances for certainty in supplying them.

It is not necessary here to set forth at length the mental qualities requisite to make the good observer of therapeutic facts. How honest he must be, how keen of perception, how wide and far seeing; how rigid in his methods of exclusion, and how severe in the logic of his deductions, we have seen when speaking of the torturing weary burden, that the want of such qualities has imposed on medicine. I mean the great burden of its false facts. A fact may indeed be none the less acquired, even though it have but a single observer;

but if there be a cloud of witnesses to it, how much more likely is it, or at least how much more readily, do we believe it to be true. Therefore combined inquiries in regard to the action or value of any medicine becomes one of the surest means of attaining therapeutic certainty. A dozen minds directed to a single point, see all about it, while if there be but one, how apt is it to approach it from a single side. But if the observer be an accomplished pathologist, that is, one versed in the knowledge of the history, causes, progress, and changes of disease — one who knows in what the disorder of a function consists, and what anatomical elements are involved, and how far they are involved — by what pathway comes restoration, and by what death, and what foot-prints the latter leaves upon the body, how much more likely are his therapeutical facts and observations to be pertinent, discriminative, and valuable than those of one to whom all such things were meaningless!

It is the difference implied by one ignorant of its cause, stating remedies for a dropsy, and one who, by diagnostic skill, could accurately refer it to the kidney, heart, liver, or other organ as the case might be.

We gather from this, then, that therapeutic truths are to be tested and therapeutic doubts solved most readily, and satisfactorily, by practical, educated and honestly critical observers, working preferably in conjunction, and always in the presence of disease, or in other words, by the bedside of the sick. All departments of medicine become tributary to this end, and should therefore be diligently pursued, but neither anatomy nor physiology nor pathology nor chemistry is competent to predicate from observations in its own department what shall be true in this of therapeutics. Whatever triumphs therefore, are proclaimed as gained by chemical or physical methods of inquiry, or even by that last most hopeful and pretentious method, which seeks to determine the action and value of a remedy in man, by its hypodermic introduction into the system of animals, must all wait their final acceptance, until clinical tribunals have passed upon their worthlessness or their merits.

This is the old way along which, step by step, the only real advances to certainty have been made, that are made. This is the only true way by which the yet overhanging clouds of doubt are to be scattered.

The Future of Therapeutics.

What now of the future of therapeutics? Is the way too hard, or the clouds too dark for hope? By no means. There is enough in its immediate past that is reliable, tangible and convincing, to light up the future with sustaining assurances.

The conditions of disease, in an organism by no means perfect, are so many and so constantly changing—the agents made use of to control or restore them are, at best, so obscurely applied, and the remedial relations between the two so complicated, that we may not ever perhaps look for absolute certainty in this department, but year by year these conditions are becoming better studied and defined, and the purpose and the power of remedies more thoroughly appreciated, until the problems of disease and cure, as affected by therapeutical interference, will come at length to involve the fewest possible unknown quantities, and be capable of comparatively accurate and satisfactory solutions.

Doubts there may be always, mere approximations to truth, hasty and grievous errors, but still such real acquisitions attained, after the manner we have indicated, as will satisfy the hungry wants of rational souls, preserve the faith, and bless mankind more than ever before.

The ideal of modern therapeutics, as portrayed by a master,* is, "to suppress by an excellent public and private hygiene, the most of the causes that generate disease; to avert by appropriate preventive medicines, the more autonomous maladies, or those independent of pathogenetic causes; to dissipate always purely functional troubles; to repair numerous anatomical disorders, and to cure the majority of diathesiac affections, if not in the individual, at least in the race."

With hopeful, honest hearts, therefore, gentlemen, begin to-day the student labors that will help to make you sharers in the reality of this high ideal. Strive earnestly, not as if depressed by doubts, but like those

> "Who rowing hard against the stream, Saw distant gates of Eden gleam, And did not dream it was a dream."

^{*} M. Gubler.



